

## PIN VERIFICATION USING CIPHER BLOCK CHAINING

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### ABSTRACT

A PIN verification apparatus comprises a plurality of cipher blocks linked in a Cipher Block Chain (CBC) and keyed with a secret PIN Verification Key (PVK). A first input block is coupled to a first cipher block in the CBC chain and is configured to receive a plaintext block derived from a secret PIN. A second input block is coupled to a second cipher block in the CBC chain capable of receiving a plaintext block derived from a non-secret entity-identifier and ciphertext from a cipher block in the CBC chain.